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Outlook and appraisal

Overview

The Scottish and UK economies strengthened appreciably in their recovery from recession in the 2nd quarter of this year. Preliminary UK data for the 3rd quarter indicates some weakening but at 0.8% over the quarter growth exceeded expectations. Scottish GDP growth fell again in the first quarter, by -0.2%, and with zero growth in 2009q3 and 0.1% growth in the final quarter of 2009, there is a case for arguing that the Scottish economy did not emerge from recession until the 2010q2, two quarters after the UK. The Scottish economy went into recession one quarter later than the UK. The fall in Scottish GDP during the 'recession' to 2010q1 was therefore -5.81% compared to a fall of -6.32% during the recession in the UK, still less severe than the UK. But with growth of 1.3% in the 2010q2, compared to 1.2% in the UK, the Scottish bounce back was considerable. However, there is reason to believe that an unsustainable bounce back in construction and re-stocking were key reasons for the strength of the recovery in the second quarter which would tend to fade away in later quarters. The 0.8% preliminary estimate of UK 3rd quarter growth in part appeared to contradict that assumption, but construction growth remained strong to the incredulity of many associated with the industry. We still await further data to ascertain the spending composition of the 3rd quarter UK growth rate and whether temporary re-stocking was still a principal driver, or whether there had been a pick-up in more sustainable export and investment growth.

In the absence of 3rd quarter Scottish GDP data until publication in late January, we must rely on survey evidence. This suggests a weakening in the Scottish growth, but sectors with a strong export focus such as engineering continued to recover, perhaps buoyed by a favourable sterling exchange rate. Those sectors and companies relying

more on domestic demand appeared less robust, as household and corporate confidence weakened, perhaps in part due to the uncertain prospect raised by the forthcoming public spending cuts. Business confidence and optimism about the future remained largely weak. There are concerns about bank lending, especially in construction, as bank deleveraging raises the likely cost and availability of funding loans for new investment and for refinancing of existing debt.

While GDP in Scotland is now clearly rising so too is unemployment! GDP has fallen by about the same proportion in Scotland as the UK during the recession but Scottish unemployment has risen more to a rate above the UK. From an analysis of the data this puzzle may be 'explained' as follows.

First, a comparable GDP fall, other things equal, might have been expected to push up the Scottish unemployment rate by more than the UK for simple arithmetic reasons since the Scottish rate was initially appreciably below the UK rate. Secondly, unemployment rose more quickly than the UK after 2009Q2 because inactivity rose more quickly in the UK. Thirdly, there was significant measured job loss in Scotland in 2010Q1. Inactivity rose strongly in Scotland dampening the rise in unemployment but suggesting that Scottish unemployment may continue to rise relative to the UK if some or all of the increased numbers of inactive workers decide to return to the labour market. Finally, there is the possibility that measurement error is clouding the outcome. If some of the measured surge in Scottish job losses actually occurred before 2009Q4 then that in itself would account for some of the faster rise in unemployment. By 2010q1 the contraction in Scottish jobs over the recession was, at -4.47%, a lot greater than the UK contraction of -2.54%. Total Scottish employment had fallen by -114,000, Scottish unemployment had risen by 112,000 and Scottish and UK inactivity had moved to comparable levels. So, maybe there isn't a puzzle at all! And while considerable personal and family pain lies behind such job losses there may be a silver lining for the Scottish economy. The greater Scottish job loss and comparable GDP change suggests a relative rise in Scottish productivity. If so, average Scottish competitiveness will have risen.

Looking forward, the UK monetary policy environment remains supportive with interest rates held at 0.5% but with additional monetary expansion put on hold at the most recent MPC meeting. UK inflation stands at 3.1%, high by international standards, so the MPC must trade off potential inflationary risk against the prospect of weakening growth and a continuing output gap.

Fiscal policy is markedly contractionary. Following the Comprehensive Spending Review the expected cut in the Scottish government's budget is expected to be around 11% by 2014-15. We have re-estimated the impact of this cut in DEL, which in the previous Commentary we took to be 14%. Total job losses range from -49, 000 in the flex-price case to -113,000 in the fixed-price case, with GVA falling by just over -1% and just under -3.5%. Public sector job losses range from just under 60,000 to a little under 71,000. Private sector job losses are moving towards 43,000 in the fixed price case but when wages and prices are flexible there is a private sector job gain of 10,500. In this latter case, as before, there is a 'crowding-in' effect on private sector activity due to the fall in wages and intermediate input prices improving the competitiveness of the sector. However, the 'crowding-in' effect is relatively weak and certainly insufficient to offset the public sector job losses.
Of course, the Scottish government has options which in effect may change the measured Scottish structural and behavioural relationships that are present in our model. If these are exercised in the forthcoming Budget, the GVA and job loss could be lower.

There is considerable uncertainty whether private sector growth will pick up sufficiently

to offset the planned contraction in public spending. Such a private sector recovery is currently much dependent on the growth of exports and investment because household spending remains subdued as families deal with the aftermath of the financial crisis and recession. Companies are becoming cash rich as rising profits increase their cash holdings. They are therefore in a position to begin investing on a much increased scale. Companies main concern will be uncertainty about demand and export demand in particular. They will also be concerned about the availability of bank lending to support own resources. While there is clear evidence of growth in the world economy, the weakness of the US economy is a cause for concern.

Against this background we are forecasting GVA growth of 1% this year, which is greater than our June forecast of 0.7%. Household spending is recovering but increases only marginally this year, then increases slightly in 2011 and is close to trend in 2012. The rise in planned welfare cuts since our last forecast will take out nearly £2bn of demand from Scottish households by 2014-15. The timing is uncertain but we expect it to contribute to the weak growth of household spending. Export growth picks up this year as the growth of world trade recovers. There is strong positive growth for Scottish exports both to rest of world and rest of UK, with the latter weaker due to the fiscal consolidation. Private sector investment growth in 2010 is revised up from our June forecast and the rebound continues into 2011 and 2012 after a recession that produced one of the most severe contractions in private investment in modern times. The fiscal consolidation has broadly the same aggregate impact as forecast in June. All these reasons taken together lead to a forecast of 1.1% GDP growth in 2011 and 1.9% in 2012. That is the same as the June forecast for 2011 but slightly lower for 2012. Our fear is that the greater welfare spending cuts may dampen growth in 2012 compared to our previous forecast. Compared to the UK these forecasts suggest that the recovery continues to be weaker in Scotland than the UK, especially in 2011.

In the labour market, net jobs grow by -0.6% in 2010, +1.0% in 2011, and +1.8% in 2012. By 2012, total jobs are forecast to be around 47,000 lower than the last peak in 2008. By sector, the burden of jobs losses is borne by the service sector in 2010 with net job losses of just under 14,000. Construction loses just above 900 jobs this year, while jobs are gained - just under 2,000 - in production as manufacturing especially expands. Positive but fairly weak jobs growth occurs in all aggregate sectors in 2011 and 2012. We predict that unemployment will continue to rise into next year peaking at around 286,000 before falling to just under 262,000 in 2012.

Recent GDP performance

The Scottish economy grew by 1.3% during the second quarter of this year, according to official data released on October 20^{th1}. This was slightly faster than the UK growth rate of 1.2%. Over the year to 2010 Q2 Scottish GDP in constant basic prices fell by 1.7%, while UK GDP fell by 1.5%. Figure 1 shows the quarterly movements in Scottish and UK GDP.

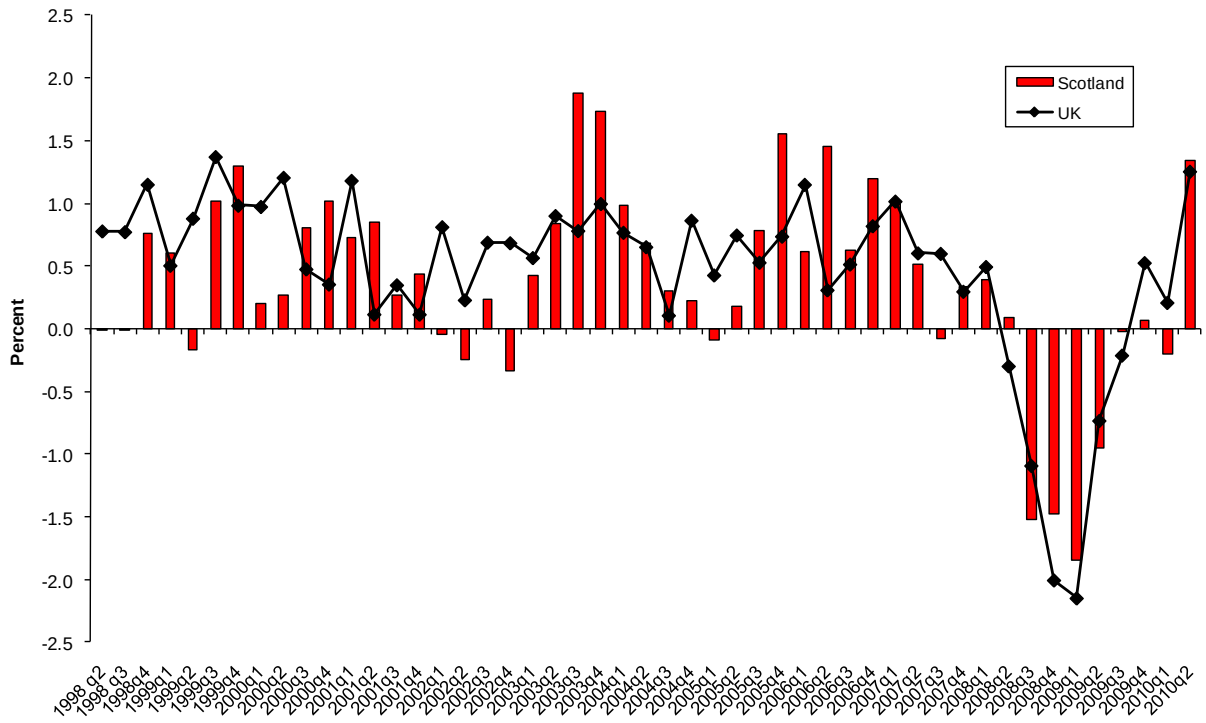
In the first quarter of the year Scottish GDP had fallen again, by -0.2%, compared to a rise of 0.2% in the UK. Indeed, with 2009 Q4 data now revised down to 0.1% growth from 0.2% earlier it could be argued that Scotland continued in recession until 2010 Q1, thereby coming out of recession in the second quarter some 2 quarters after the UK. But the new revised Scottish data also reveal that the economy did not go into recession until 2008 Q3, one quarter later than the UK.

The comparative overall GDP performance of Scotland and the UK over the recession and subsequent recovery is given in Table 1.

The table reveals that scale of the recession was slightly weaker in Scotland at -5.69% compared to a fall of -6.32% in the UK. Dating the trough of the recession as occurring in 2009 Q3 we can see that the recovery of 1.21% of GDP is weaker here than in the UK where GDP has grown by 2% since the trough of the recession in 2009 Q3.

In the 2nd quarter 2010, the service sector – accounting for 74% of overall GVA on 2007 weights – grew by 0.3% in Scotland but by almost 0.6% in UK – see Figure 2.

Figure 1: Scottish and UK Quarterly GDP growth, 1998q2 to 2010q2



Over the year to 2010 Q2, GVA in Scottish services fell by -1.2% compared to a fall of -1% in the UK. The comparative overall GVA performance of Scottish and UK services over the recession and subsequent recovery is given in Table 2. The first point to note from Table 2 is that the recession was shallower in services compared to the economy as a whole with GVA falling by -4.36%. The recession in Scottish services was also shallower than in UK services where GVA fell by -4.64%. But the UK service sector, as with the economy as a whole, is recovering more quickly growing by 1.55% since the recession trough compared to growth of 0.18% in Scottish services.

Table 1: Scottish: and UK GDP: recession and recovery

	Scotland	UK
GDP fall in recession	-5.69%	-6.32%
Change from peak to 2010 Q2	-4.55%	-4.45%
GDP recovery to 2010 Q2	1.21%	2.00%

Table 2: Scottish and UK Services GVA: recession and recovery

	Scotland	UK
GVA fall in recession	-4.36%	-4.64%
Change from peak to 2010 Q2	-4.18%	-3.16%
GVA recovery to 2010 Q2	0.18%	1.55%

Figure 2: Scottish and UK services GVA growth at constant basic prices 1998q2 to 2010q2

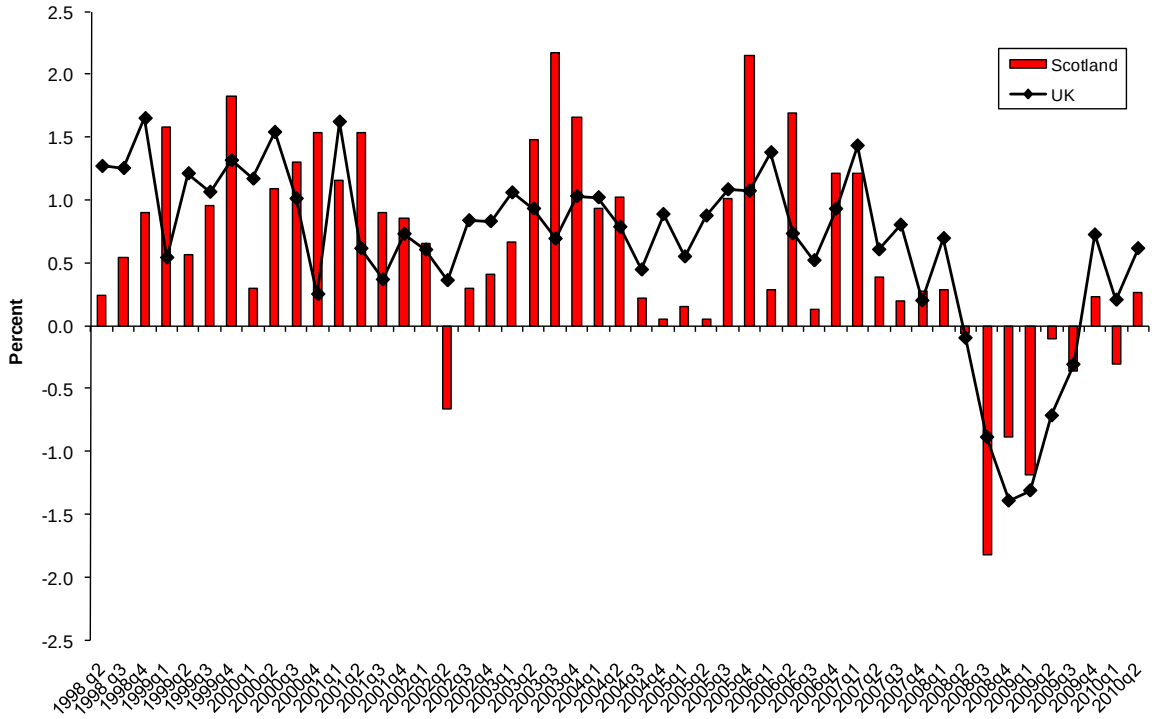


Figure 3: Scottish and UK financial services GVA growth at constant basic prices 1998q2 to 2010q2

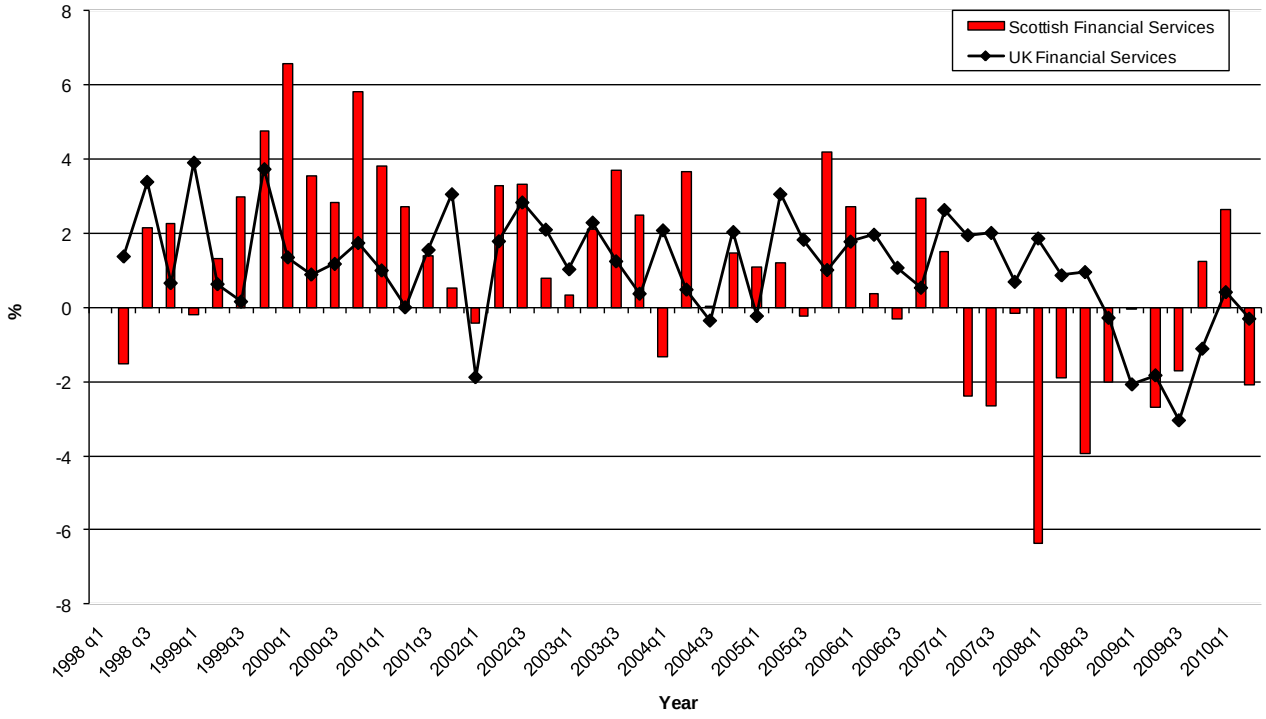


Table 3: Scottish and UK Manufacturing GVA: recession and recovery

	Scotland	UK
GVA fall in recession	-11.44%	-14.58%
Change from peak to 2010 Q2	-9.10%	-10.91%
GVA recovery to 2010 Q2	2.64%	4.30%

Table 4: Scottish and UK Construction GVA: recession and recovery

	Scotland	UK
GVA fall in recession	-13.64%	-14.50%
Change from peak to 2010 Q2	-2.56%	-5.97%
GVA recovery to 2010 Q2	12.82%	9.97%

Within services, the main sectoral drivers of recovery in 2010 Q2 were retail & wholesale (10% of overall GVA), real estate & business services (REBS) (20% of GVA), and other services (5% of GVA). Retail and wholesale grew by 1.8%, REBS by 1.7%, and other services by 0.4%. GVA did not change in public administration, education & health (21% of overall GVA), while output fell in hotels & catering (3% of GVA), financial services (8% of GVA), and transport & communication (7% of GVA), by -1.0%, -2.1% and -2.4%, respectively. Retail & wholesale exhibited much stronger growth than in the UK where the sector grew by only 0.2%. Conversely financial services was much weaker in Scotland with the UK sector only contracting by -0.3% – see Figure 3.

The manufacturing sector in Scotland - accounting for 13% of overall GVA - grew by 2.2% in 2010 Q2 compared to the somewhat weaker growth performance of UK manufacturing which grew by 1.6% - see Figure 4. Over the year to the second quarter manufacturing contracted by -3.5% in Scotland and by -3.1% in the UK.

The comparative overall GVA performance of Scottish and UK manufacturing over the recession and subsequent recovery is given in Table 3.

The recession is shown to have had a much stronger impact on Scottish and UK manufacturing than the economy as a whole, and its principal component the service sector. Scottish manufacturing lost -11.44% of its output during the recession while UK manufacturing suffered an even greater output loss of -14.58%. But despite a good start, and better performance in the most recent quarter, the recovery in Scottish manufacturing has been weaker than its UK counterpart with growth of 2.64% compared to 4.30% in the UK.

Within manufacturing, the performance of engineering and allied industries was encouraging in 2010 Q2. The sector overall accounts for under 4% of economy-wide output, with electrical engineering, 'electronics', accounting for around one half of the sector's output, while mechanical engineering and transport equipment account almost equally for the remainder. Electronics grew by 6.5% in the quarter compared to 3.3% in the UK, while mechanical engineering was weaker growing by 0.3% compared to much stronger growth of 5.2% in the UK. Transport equipment, on the other hand, grew robustly in Scotland, by 10.1%, while its UK counterpart contracted by -0.8%. Growth was fairly broadly spread within manufacturing, suggesting that the industry may finally be reaping the benefits of a lower sterling exchange rate. Metals and metal products grew by 3.2% (5.1% in UK), textiles, footwear, leather and clothing grew by 4.6% (5.4% in UK), chemicals & manmade fibres grew by 2.6% (-0.9% in UK) and other manufacturing grew by 0.3% (1.4% in UK). Only two principal manufacturing sectors contracted in the second quarter: refined petroleum and nuclear fuel processing cut back by -3%, while food, drink and tobacco experienced a small fall of -0.1%. But within the latter sector , the drinks sector contracted significantly with output falling -3.3% (-1.6% in UK). In the remaining food and tobacco sector GVA grew by 3.9% (1.8% in UK).

Finally, the construction sector grew exceptionally strongly in both Scotland and the UK. With growth of 10.4% and 9.5%, respectively, the sector has bounced back significantly after recession as Figure 5 indicates.

The comparative overall GVA performance of Scottish and UK construction over the recession and subsequent recovery is given in Table 4. In construction, the output lost during the recession was clearly the greatest of all the principal sectors, with GVA falling by -13.64% in Scotland and even larger -14.5% in the UK. Moreover, by the end of the second quarter GVA was only 2.56% lower than the previous peak before the recession in Scotland and 5.97% lower in the UK. The sector has therefore experienced a classic 'V' shaped recession in both Scotland and the UK,

Figure 4: Scottish and UK manufacturing GVA growth at constant basic prices 1998q2 to 2010q2

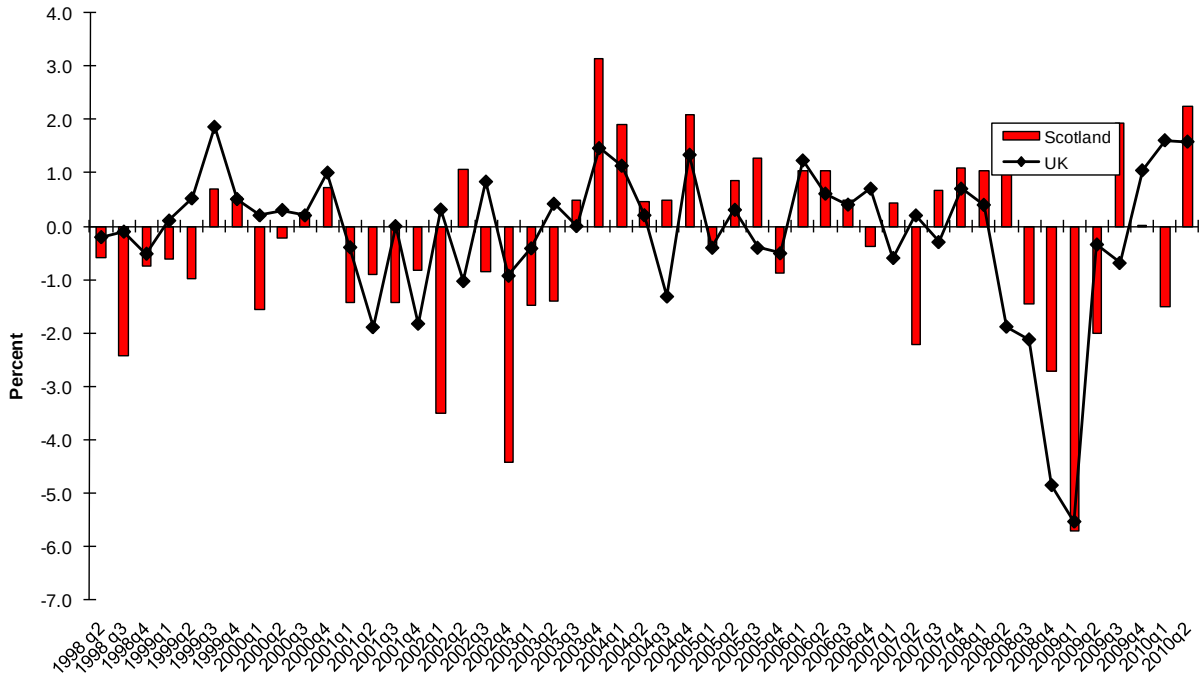


Figure 5: Scottish and UK construction GVA Volume Growth 1998q2 - 2010q2

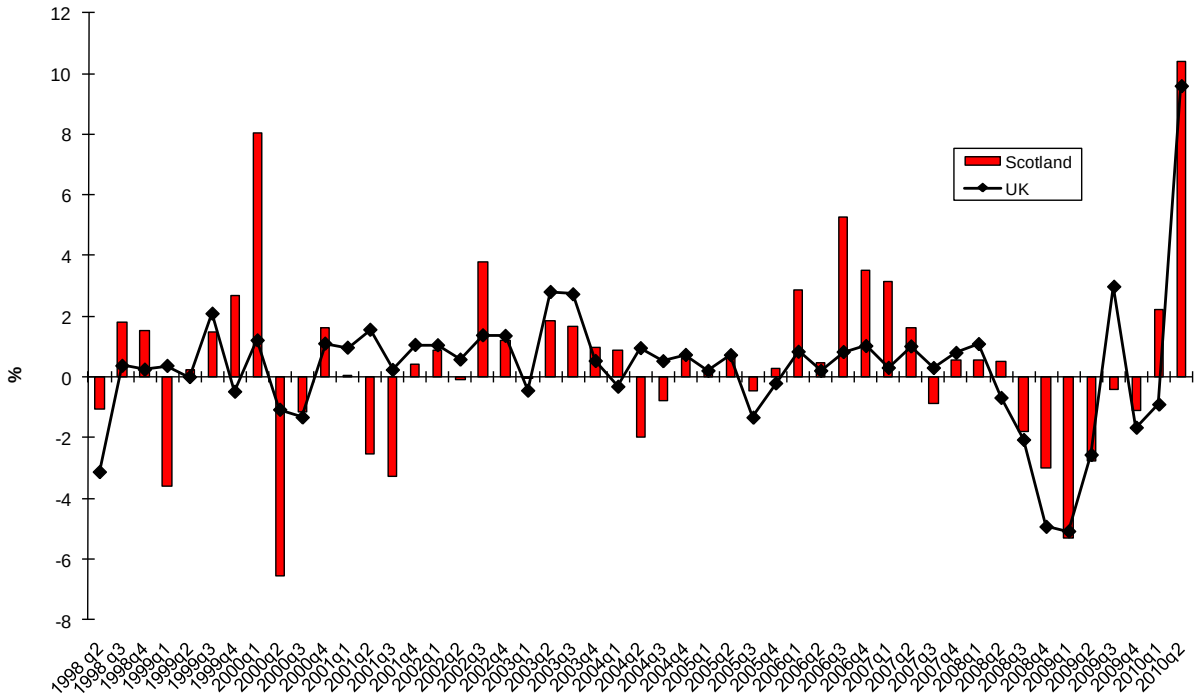


Figure 6: Growth of key sectors in Scotland 1998q2 to 2010q2

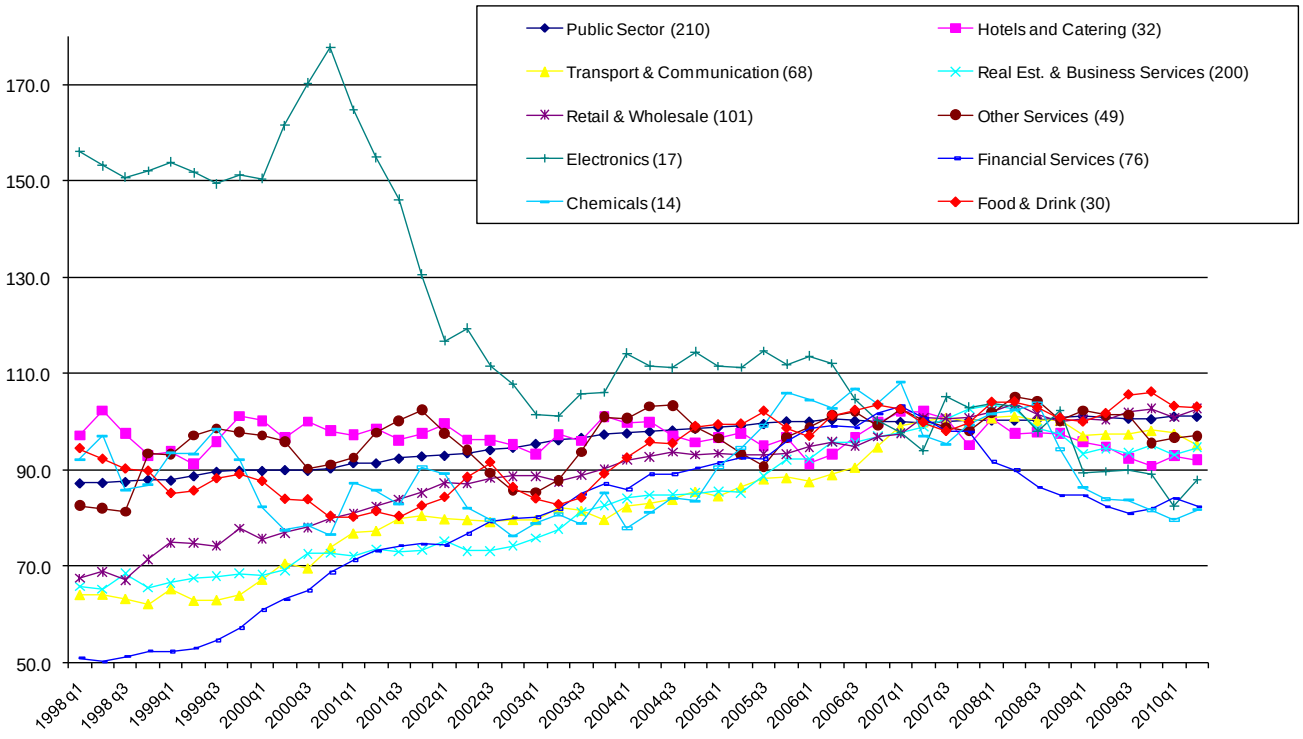
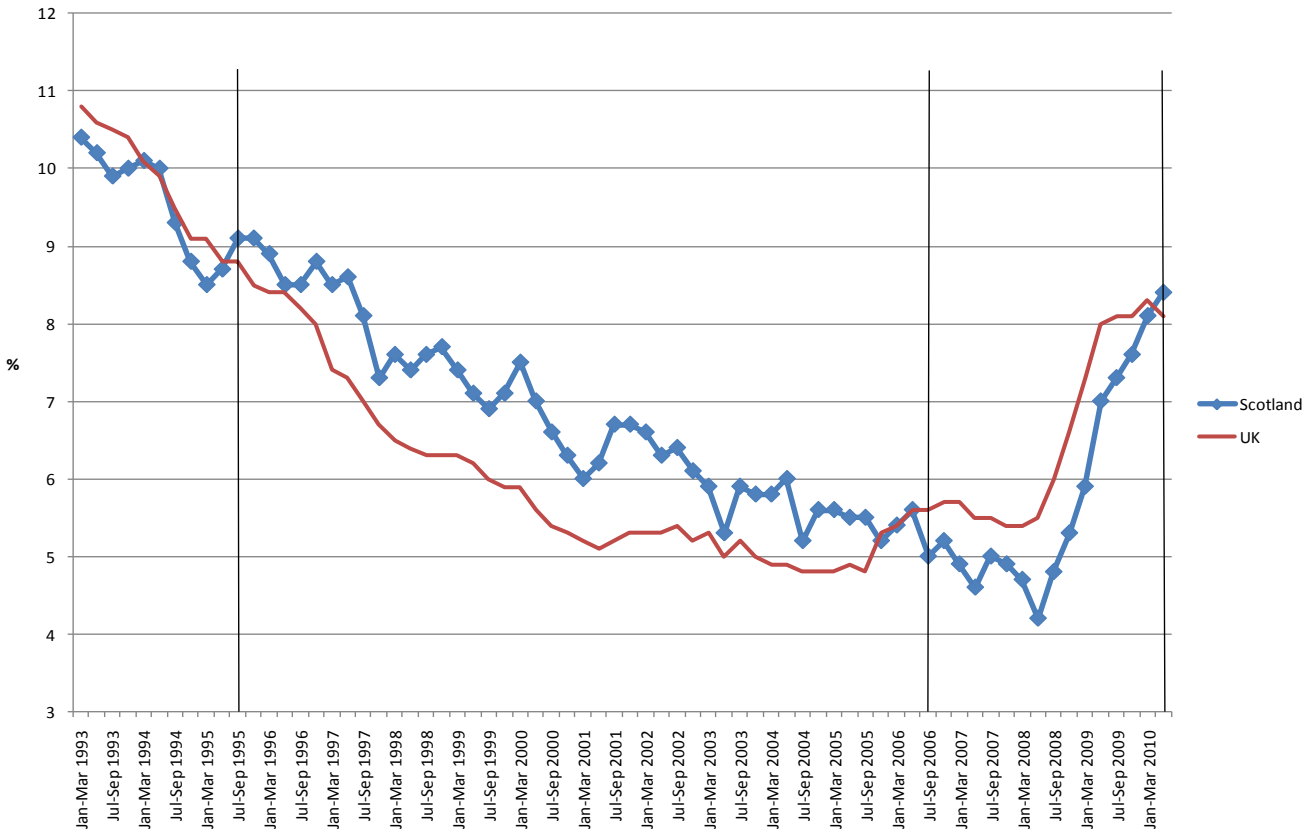


Figure 7: ILO unemployment rates, Scotland and the UK



with activity apparently picking up more quickly in Scotland. The latest preliminary estimate for UK GDP in the third quarter suggests the fast pace of improvement in the sector in the UK has continued with growth of 4% posted. It is difficult to be certain whether the rapid return to growth in construction will be wholly or partially sustained. Anecdotal evidence from the industry in Scotland appears sceptical of such a rebound. There are several explanations offered for the rapid revival: postponed activity due to bad weather in the early part of the first quarter; the delayed consequence of the fiscal stimulus; the consequence of the 'flurry' of construction contracts signed off by the previous UK Labour government. None of these explanations is very convincing.

Figure 6 provides data on the recent GVA output performance in key Scottish industry sectors before, during and after the recession. The data clearly show evidence of recovery across several, but not all, sectors.

Third quarter survey evidence

Scottish GVA statistics for the 3rd quarter 2010 will not be available until 20 January 2011. While 3rd quarter GVA statistics were made available for the UK 26 October, they represent a first release and are usually revised considerably. The Scottish data coming later are more reliable and less subject to marked revision. In the meantime we must rely on survey data to try and gauge the performance of the Scottish economy in the 3rd quarter.

A detailed Review of Business Surveys appears later in this Commentary. What that review makes clear is that the surveys offered a mixed view of the Scottish economy during that period. This in part is due to the coverage of the surveys varying between different sectors of the economy. So, surveys of Scottish engineering and oil and gas are fairly bullish both in terms of actual and expected performance. Outside the engineering sector there is some consensus that growth weakened in the 3rd quarter compared to the second quarter - mirroring the UK GVA data - but the CBI survey was more upbeat about expected activity in the the fourth quarter than the SCBS, which noted a fall in confidence, a fading of the signs of recovery experienced in the 2nd quarter, and a downward revision of future expectations for the fourth quarter and for the year ahead.

So, the surveys appear to broadly agree that growth in the Scottish economy slowed in the third quarter but sectors with a strong export focus such as engineering continued to recover, perhaps buoyed by a favourable sterling exchange rate. Those sectors and companies relying more on domestic demand appear less robust, as household and corporate confidence weakened, perhaps in part due to the uncertain prospect raised by the forthcoming public spending cuts. Business confidence and optimism about the future remains largely weak. Finally, sentiment in the construction sector appears at odds with buoyancy present in the official GVA statistics, with declining confidence and concerns about the availability and cost of bank finance.

Recent labour market performance

The recent performance of the Scottish labour market has been a cause for concern. Indeed, this performance has posed something of a puzzle because while GDP and output change in Scotland over the recession was no worse than the UK, the deterioration in the unemployment rate in Scotland has been much worse. Furthermore, the Scottish unemployment rate went above the UK rate in the second quarter of this year.

Figure 7 tracks the quarterly Scottish and UK unemployment rates from the beginning of 1993 until the second quarter of this year. During this period there was one key stylised fact and three distinct phases. The stylised fact is that both the Scottish and UK economies enjoyed falling trend unemployment until the recent recession. Secondly, Scottish unemployment was below UK unemployment until the 3rd quarter 1995 - a probable lagging consequence of the fact that Scotland did not suffer a recession in 1990-91, whereas the UK did. From the 3rd quarter 1995 until the second quarter 2006, Scottish unemployment was higher than the UK. But after that, from the 3rd quarter 2006 until the 1st quarter of this year, Scotland enjoyed a superior unemployment performance. This superior unemployment performance may have been due to the following reason. Scottish GDP growth was a little less than the UK but overall the mid 2000's was one of strong growth. This growth may have been associated with a lower unemployment rate in Scotland because a faster UK growth rate was required to keep unemployment stable[2].

In order to seek to explain the puzzle concerning Scottish GDP and unemployment change during the recent recession we have begun a small programme of systematic research on that relationship. The first fruits of that research are presented in Box 1 in the Forecasts of the Scottish Economy section of this Commentary. What we are seeking to do is examine statistically, the relationship between GDP change and unemployment. As output rises, the demand for labour will rise and unemployment will fall, assuming other things, such as productivity, hours of work, inactivity, remain unchanged. This negative relationship between changes in GDP and unemployment is known as Okun's Law after the US economist Arthur Okun who specified and provided a statistical estimate of the relationship for the US.

Estimating this relationship for the UK going back to 1971 shows that it is not stable. We have less data for Scotland and so are able to estimate the relationship only back as far as 1995. What our results show is that the relationship holds for Scotland and the UK, with the UK unemployment rate slightly more sensitive than the Scottish rate to GDP changes. We are also able to calculate from the estimation, the rate of growth of GDP consistent with a stable unemployment rate. This proves to be 2% per annum for both Scotland and the UK - around 0.5% per quarter. But

Figure 8: GVA and jobs in recession and recovery: Scotland and UK

the research of others also reveals that the relationship changes over the business cycle, particularly recessions as for example hours of work, labour productivity and inactivity changes. This proves to be the case in the most recent recession where we can identify a significant break in the relationship in the last two years - 8 quarters - of the 15 year sample. The sensitivity of unemployment rate changes to changes in GDP has risen during the recession in both Scotland and the UK. Moreover, the sensitivity of the Scottish unemployment rate to the change in GVA rose above that estimated for the UK.

We now need to explain why and how the sensitivity of the Scottish unemployment rate to GDP change has risen. For the moment, until more rigorous research is done, we feel that some interesting insights can be obtained from casual empiricism.

Figure 8 plots GVA and employment in Scotland and the UK during the recession and recovery.

The figure clearly shows that the decline in Scottish GVA broadly tracked the decline in the UK but was slightly shallower. However, if 2010Q1 is taken as the final quarter of the Scottish recession given the fall again in GVA in that quarter, we can estimate the drop in GVA during the recession to be -5.81% in Scotland and -5.83% in the UK. One doesn't need to be a statistician to suggest that there is no significant difference between the two. But total employment performance does differ. A key event is what happened between 2009Q4 and 2010Q1. Scotland lost more than fifty thousand jobs, while the UK experienced a slight fall. Prior to the final quarter of last year, the Scottish jobs market had held up remarkably well, with employment falling by -2.39% while GVA fell by -5.62%. The job loss was less than the UK employment fall of -2.54% with GVA falling by -5.83%. But after the significant haemorrhage of Scottish jobs over the winter by 2010Q1 employment had fallen by -4.47% since the peak prior to the start of recession compared to -2.83% in the UK. While of little comfort to those who lost their jobs, the bigger jobs cutback in Scotland implies that productivity may have improved relative to the UK, which might help Scotland's recovery.

Figure 9 charts the behaviour of unemployment numbers in Scotland and the UK during the recession and recovery indexed to 100 for the start of recession.

What the figure reveals is that the rise in unemployment in Scotland broadly tracked the UK during the recession until 2009Q2 when it began to surge upwards while UK unemployment numbers largely stabilised. Two questions arise from this chart. First, why did unemployment in Scotland surge after 2009Q2? Secondly, why was there not a further marked upwards surge in 2010Q1? The answer lies in what was happening to inactivity.

Figure 9: Unemployment in recession and recovery, Scotland and UK

Figure 10: Inactivity in recession and recovery: Scotland and UK

Table 5: Composition of the Fiscal tightening in 2014-15

£ billion	March 2010 budget	June 2010 budget	October 2010 spending review
Tax	21.5	29.8	29.8
Spending	50.9	82.8	80.5
Investment spending	17.2	19.3	17
Current spending	33.7	63.5	63.5
of which:			
Debt interest	7	10	10
Benefits	-0.3	10.7	17.7
Public services	27	42.8	35.7
Total tightening	72.4	112.6	110.3
% Spending	70	74	73
% Tax	30	26	27

Source: Institute for Fiscal Studies

Figure 10 charts the numbers inactive in Scotland and the UK during the recession and recovery indexed to 100 for the start of recession. This chart shows that inactivity in Scotland, while a little more volatile, broadly tracked the UK until the first quarter of 2009. But from 2009Q2 inactivity rose quickly in the UK but remained broadly stable, rising slightly, until 2009Q4. Given output and employment were following broadly similar paths in Scotland and UK during this sub-period, this suggests that the surge in Scottish unemployment relative to the UK after 2009Q1 was due to a greater propensity of recently unemployed Scottish workers to offer themselves for work than their rest of UK counter parts. However, in the winter of 2009-10 the significant loss of Scottish jobs appears to have produced a surge in inactivity as large numbers dropped out of the jobs market, so that high and rising unemployment did not increase much more quickly than in the previous 3 quarters.

So, to summarise. The puzzle of Scottish unemployment rising more quickly than the UK, and so rising above the UK, at a time of comparable GDP change may be 'explained' as follows. First, a comparable GDP fall, other things equal, might have been expected to push up the Scottish unemployment rate by more than the UK for simple arithmetic reasons since the Scottish rate was initially appreciably below the UK rate. Secondly, unemployment rose more quickly than the UK after 2009Q2 because inactivity rose more quickly in the UK. Thirdly, there was significant measured job loss in Scotland in 2010Q1. Inactivity rose strongly in Scotland dampening the rise in unemployment but suggesting that Scottish unemployment may continue to rise relative to the UK if some or all of the increased numbers of inactive workers decide to return to the labour market. Finally, there is the possibility that measurement error is clouding the outcome. If some of the measured surge in Scottish job losses actually occurred before 2009Q4 then that in itself would account for some of the faster rise in unemployment. By 2010q1 the contraction in Scottish jobs over the recession was, at -4.47%, a lot greater than the UK contraction of -2.54%. Total Scottish employment had fallen by -114,000, Scottish unemployment had risen by 112,000 and Scottish and UK inactivity had moved to comparable levels. So, maybe there isn't a puzzle at all!

The CSR and fiscal consolidation

The UK picture

The UK coalition government is seeking to remove the UK's structural budget deficit and stabilise its debt position by the end of the present Parliament in 2015. To achieve this, the government announced in its June Budget a fiscal tightening of £113bn - around 16% of government spending and 75% of current borrowing. On October 20th the government produced its Comprehensive Spending Review (CSR) outlining £81bn of proposed spending cuts, with the remainder to be financed by higher taxes, such as the increase in VAT to be introduced next January. UK spending departments are to experience an average real cut of just over 11% and welfare spending is to fall by £18bn.

Table 5, produced by the Institute for Fiscal Studies (IFS) in London, outlines the key changes between the CSR, the June coalition Budgets, and the March Budget of the previous Labour government.

Key points to note about the CSR in terms of the potential macro and socio economic consequences are as follows. First, the fiscal tightening by 2014-15 at £110bn is slightly

less than the £113bn of the June Budget, but considerably more than the £72bn proposed by the Labour government in its March Budget. Secondly, the balance between spending cuts and tax rises is similar across all three budgets being close to a 70:30 split. Thirdly, the reduction in spending on public services and hence the cuts in departmental expenditure limits (DEL) is less in the CSR than in the June Budget. The average cut in department DEL by 2014-15 is just over 11% compared to 14% in the June Budget. Fourthly, the relief for spending on public services and departmental DEL is made possible by an increase in the cut in welfare benefits to nearly £18bn. The June Budget contained just under £11bn planned benefit cuts, while the March Budget planned to raise benefits slightly. Fifthly, the CSR reduced the planned cut in investment from £19.3bn to £17bn thus accounting for the slightly reduced fiscal tightening between June and the CSR. The cut in investment is now the same as in the March Budget but this still means that department's capital budgets are still being slashed by -29%. Finally, IFS has analysed the distributional consequences of the CSR and concludes that by 2014-15 the tax reforms and welfare benefit cuts are regressive within the bottom 90% of the income range with the poorest paying a relatively greater share of their income. Added to this is the Treasury's own analysis is that the planned cuts it department expenditures and hence public services is regressive for those expenditures that can be modelled. None of this analysis by IFS and Treasury assumes behavioural change in response to tax and welfare reforms and spending cuts.

Scottish consequences and impact

Table 6 shows the Treasury view of the real budget (DEL) available to the Scottish government following the CSR. The real fall in the Scottish DEL of -10.6% is lower than the fall in the overall UK DEL because of the differential pattern of spending cuts across departments and the workings of the Barnett formula. Comparable programmes such as health and education have been significantly protected in the UK, in real terms, rising - for the resource element - by 1.3% in the former and falling by -3.4% in the latter. However, the cut in the Scottish government's capital budget is at -38% greater than the -29% cut in capital budgets in the UK. This is again due to the pattern of UK cuts and the operation of the Barnett formula. Two Barnett comparable capital programmes have been cut significantly in the UK: school building, house building, and hospitals, so that by 2014-15 the capital budgets of: Education is to be cut by -60%, CLG Communities is to be cut by 74%, and NHS capital is to be cut by 17%.

Table 6: Scotland's DEL - Treasury view

	£bn in real terms					
	2010-11	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**% change**
Resource DEL Excl depreciation	24.8	24.3	24.1	23.7	23.1	-6.8
Change		-0.5	-0.3	-0.4	-0.5	
Capital DEL	3.4	2.5	2.4	2.1	2.1	-38.4
Change		-0.9	-0.1	-0.3	0.0	
Total DEL	28.2	26.8	26.5	25.7	25.2	-10.6

The Scottish government take a slightly different view from the UK Treasury of their budget. This is shown in Table 7.

Table 7: Scotland's DEL - Scottish government view

	£bn in real terms					
	2010-11	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**% change**
Resource DEL	25.3	24.3	24.1	23.7	23.1	-8.6%
Change		-1.0	-0.3	-0.4	-0.5	
Capital DEL	3.3	2.5	2.4	2.1	2.1	-36.5
Change		-0.8	-0.1	-0.3	0.0	
Resource non-cash DEL	0.6	0.6	0.7	0.7	0.7	16.7
Total DEL	29.2	27.4	27.2	26.4	25.9	-11.3

The difference between the two views largely amounts to the Scottish government's inclusion in the 2010-11 baseline of Scotland's £387m share of the £6bn emergency cuts introduced by the UK coalition government after the election, which the UK government agreed could be postponed until fiscal year 2011-12. The Treasury has removed this sum from the 2010-11 baseline while the Scottish government includes it. The Scottish government also includes end year flexibility (EYF) monies drawn down in its 2010-11 figure, plus depreciation. The result is a slight difference in the real cut over the period, -10.6% for the Treasury, and -11.3% for the Scottish government. But the big problem is the change between this fiscal year and the next fiscal year. There is a real cut of £1.8bn according to the Scottish government figures and a smaller real cut of £1.4bn. In cash terms, the two figures are £1.3bn and £0.9bn. While the Treasury's logic for removing the postponed cuts from the 2010-11 baseline seems correct according to accounting convention, the Scottish government is also correct to highlight the fact that spending in cash terms will be £1.3bn lower next year.

We have taken the expected real cut in the Scottish DEL to be 11% by 2014-15 and undertaken the same analysis using our computable general equilibrium model (CGE) that was presented in the previous Commentary. In that analysis a 14% DEL cut was assumed.

The new job and GDP estimates are provided in Table 8.

Table 8: Impact on GVA and Jobs of an 11% cut in Scottish DEL

	Jobs		GVA	
	Fixed price	**Flex price**	**Fixed price**	**Flex price**
Private services	-35,087	6,382	-2.86%	0.36%
Manufacturing	-2,207	3,028	-0.75%	0.72%
Construction	-4,887	533	-3.39%	0.11%
Other private	-449	575	-0.99%	0.86%
Private total	-42,630	10,517	-2.12%	0.48%
Public	-70,853	-59,104	-8.31%	-6.72%
Total	-113,483	-48,587	-3.46%	-1.07%

As before there are two simulations: a fixed-price analysis, where the cut in DEL leads to a straight reduction in the demand for goods and services produced in the Scottish economy; and a flex-price analysis, where wages and output prices respond to changes in demand and substitution is possible. Total job losses range from - 49, 000 in the flex-price case to -113,000 in the fixed-price case, with GVA falling by just over -1% and just under -3.5%. Public sector job losses range from just under 60,000 to little under 71,000. Private sector job losses are moving towards 43,000 in the fixed price case but when wages and prices are flexible there is a private sector job gain of 10,500. In this latter case, as before, there is a 'crowding-in' effect on private sector activity due to the fall in wages and intermediate input prices improving the competitiveness of the sector. However, the 'crowding-in' effect is relatively weak and certainly insufficient to offset the public sector job losses.

Of course, the Scottish government has options which in effect may change the measured Scottish structural and behavioural relationships that are present in our model. If these are exercised the GVA and job loss could be lower.

Scottish government budget options

The excellent Independent Budget Review (IBR) considers cost savings and revenue raising options as a means of limiting cuts to front-line services. Some indication is also provided by IBR on where spending cuts might be made. But it is highly unlikely that the need for spending cuts will be removed by the adoption of some of these other options.

What is required is the adoption of a rational process that links fiscal consolidation to the objectives of the Scottish government. Economic stabilisation, economic growth and social justice would appear to be key. And these objectives may be mutually exclusive to some degree: a potential trade-off between equity versus efficiency and growth. For example, the CBI seems to think so and is asking the UK and Scottish governments to prioritise spending on supporting growth e.g. infrastructure at the expense of welfare payments. But how much one should trade-off equity for growth and efficiency is a value judgement and hence a political decision.

That said, we would argue that spending cuts should be applied according to the rules of a rational choice model. Blocks of spending should be defined at least to Level 4, but ideally, in certain areas, further below. Cuts should then be applied first to those spending areas where the marginal

value per pound spent to government – and hence the electorate and wider community – is least. This would rule out 'salami slicing' and suggests that some functions/services with low marginal value should be removed altogether.

The application of this principle would rule out ring-fencing Level 1 spending areas such as the health budget, and hopefully, would also rule out ring-fencing of Level 2 and 3 spending areas. This is because ring fencing implies that every activity upon which money is spent in the health budget has a higher marginal value per pound spent than spending activity under all other budgets - an unlikely proposition. However, some health spending will have a very high marginal value, perhaps spending on treatment of cancer and heart disease. It is rational to protect such areas, subject to the scale of the overall reduction in the assigned budget.

The government will not want the fiscal adjustment to destabilise the economy or damage long-run economic growth, which it is seeking to raise. We would offer the following guidance to help protect these important objectives.

Stabilisation

The aim should be to minimise the effect of fiscal consolidation on demand in the economy, so reducing secondary job losses. There is a limited role here for the government of a small open economy. But where cuts have to be made, or charges and taxes introduced, the changes should focus on spending areas with lower employment effects and income effects e.g. public administration rather than social work activities; on recipients who have lower marginal spending propensities from income received e.g. the rich as opposed to the poor, and on consumption rather than investment expenditures. Cutting public investment can contribute to a reduction in aggregate demand in the economy as well as affecting growth. High quality academic research by Alesina and Perotti in 1996 notes that " … fiscal adjustments relying primarily on tax increases and cuts in public investment tend not to last and are contractionary."

Against this background it is disappointing to note that capital spending has been cut disproportionately at the UK level as part of the fiscal consolidation. The Scottish government's capital budget is being cut by 36% to 38% by 2014-15, It is essential that the government explores all means possible to protect public capital investment, including the most effective funding mechanisms. One possibility would be for funds to be transferred from the resource - or current spending - budget to capital spending, which is allowed within the rules.

Economic growth

The aim here should be to protect the supply potential of the Scottish economy and the drivers of growth. Research suggests that innovation and R&D are critical to growth with investment especially in infrastructure, enterprise, and skills also having an important role to play. Therefore the government should consider how best to focus and protect spending in such areas.

Innovation and R&D: The government should continue to do everything it can to help the private sector undertake R&D and innovate, include facilitating technology transfer. This requires the protection of university research and policies to enhance commercialisation.

Infrastructure projects and investment: We noted above the importance of investment to stabilisation. It is also important to growth. But the issue isn't simply about trying to protect public investment. It is important to continue to encourage private sector investment and seek to remove any market or institutional obstacles that stand in its way. Inward FDI and related export promotion must continue to play a crucial role in Scottish economic growth allowing us to link into world growth hubs. Policy effort in this area should not be reduced.

Enterprise: Scottish Enterprise and the enterprise network is an easy target for many people. Yet, Scotland has a sustained history of a low-business birth-rate and weak business enterprise: viz. low innovation and R&D. There are legitimate questions about how the SE and the network secures it's goals but abolishing and returning the function to the civil service is not the answer as the Welsh experience shows.

Skills: Are important to regional competitiveness, to attracting FDI and hence to growth. But they are necessary for growth not sufficient. A dynamic economy with high productivity firms will attract in skilled workers from other regions and nations. All of which begs the question whether we need the skills development policy infrastructure that we currently have?

So, faced with the biggest fiscal cutback for many a year, the Scottish government should be bold and imaginative. There are other options to spending cuts but it is unlikely that the need for spending cuts can be removed by these other options.

Cuts should follow a rational choice rule where activities of least marginal value per pound spent are cut first. This would rule out 'salami slicing' and ring fencing of whole budget areas such as health spending. And, in the light of the Government's economic stabilisation and growth objectives, efficient policy spending that promotes the drivers of growth should be protected.

Will the fiscal consolidation work?

The UK coalition government is seeking to remove the UK's structural budget deficit and stabilise its debt position by the end of the present Parliament in 2015. But there are many risks and uncertainties to be confronted along the way.

An economy is not like a household where steps taken to balance the budget will work providing the household is disciplined enough to stick to the plan. At the economy level there are significant interdependencies and uncontrollable factors that will affect the outcome.
The key factor is the growth of the economy. If the UK and Scottish economies improve their pace of recovery from recession so that growth is more than sufficient to offset the 6% to 7% fall in aggregate demand caused by the fiscal consolidation, then a future recession will be avoided. But growth will have to be considerably faster if unemployment is to stabilise and then fall. Faster growth is also required in order to ensure that tax revenues rise, transfer payments fall and the government's finances improve as the coalition hopes.

There are favourable precedents. In the UK in 1991 at the end of that recession public sector employment stood at just over 6 million . In the next 4 years 650,000 jobs were lost and 850,000 by 1997. The UK managed this adjustment with an overall rise in employment as the economy grew by 3.1% per annum.

On present UK government plans some 490,000 public sector jobs are to go. However, the problem is that the recent recession was so much more severe than in the early 1990s. The Office of Budget Responsibility is forecasting growth of 2.6% per annum and many private forecasters consider that projection to be too optimistic. For example, the National Institute for Economic and Social Research forecast in late October that the UK economy will be much weaker than the OBR predicts. NIESR predicts that a recession will avoided but a projected weaker recovery and the fiscal brake on growth means that the public finances improve much more slowly than the OBR and the UK government expects.

With so much spare capacity after the recession, and a weaker Scottish recovery there appears little hope that the fiscal cutbacks will 'crowd in' much private sector growth here in Scotland. Worse, the fiscal cutbacks may damage business and consumer confidence so weakening private sector growth at a time when the world recovery from recession is faltering. Added to this, despite the many bright spots in the Scottish economy, Scotland's record of weak entrepreneurship, a low business birth rate, inadequate research and development and low innovation, makes one cautious that we can secure the growth in investment and exports that is required.

Forecasts

In the Scottish and UK economies the recovery from recession strengthened appreciably in the 2nd quarter of this year. Recent preliminary UK data for the 3rd quarter indicates some weakening but at 0.8% over the quarter growth exceeded expectations. Scottish GDP growth fell again in the first quarter, by -0.2%, and with zero growth in 2009q3 and 0.1% growth in the final quarter of 2009, there is a case for arguing that the Scottish economy did not emerge from recession until the 2010q2, two quarters after the UK. The Scottish economy went into recession one quarter later than the UK. The fall in Scottish GDP during the 'recession' to 2010q1 was therefore -5.81% compared to a fall of -5.83% during the recession in the UK, an almost identical outcome. But with growth of 1.3% in the 2010q2, compared to 1.2% in the UK, the Scottish bounce back was considerable. However, there is reason to believe that an unsustainable bounce back in construction and re-stocking were key reasons for the strength of the recovery in the second quarter which would tend to fade away in later quarters. The 0.8% preliminary estimate of UK 3rd quarter growth in part appeared to contradict that assumption, but construction growth remained strong to the incredulity of many associated with the industry. We still await further data to ascertain the spending composition of the 3rd quarter UK growth rate and whether temporary re-stocking was still a principal driver, or whether there had been a pick-up in more sustainable export and investment growth.

In the absence of 3rd quarter Scottish GDP data until publication in late January, we must rely on survey evidence. This suggests a weakening in Scottish growth, but sectors with a strong export focus such as engineering continued to recover, perhaps buoyed by a favourable sterling exchange rate. Those sectors and companies relying more on domestic demand appeared less robust, as household and corporate confidence weakened, perhaps in part due to the uncertain prospect raised by the forthcoming public spending cuts. Business confidence and optimism about the future remained largely weak. There are concerns about bank lending, especially in construction, as bank deleveraging raises the likely cost and availability of funding loans for new investment and for refinancing of existing debt.

The UK monetary policy environment remains supportive with interest rates held at 0.5% but with additional monetary expansion - quantitative easing via the Asset Purchase Facility - put on hold at the most recent MPC meeting. UK inflation stands at 3.1%, high by international standards, so the MPC must trade off potential inflationary risk against the prospect of weakening growth and a continuing output gap.

Fiscal policy is markedly contractionary, as the discussion above on the Comprehensive Spending Review (CSR) notes, and there is considerable uncertainty whether private sector growth will pick up sufficiently to offset the planned contraction in public spending. A private sector recovery is currently much dependent on the growth of exports and investment because household spending remains subdued as families deal with the aftermath of the financial crisis and recession. Companies are becoming cash rich as rising profits has increased their cash holdings. They are therefore in a position to begin investing on a much increased scale. Companies main concern will be uncertainty about demand and export demand in particular. While there is clear evidence of growth in the world economy, the weakness of the US economy is a cause for concern. The latest US jobs

figures, indicating 150,000 net new jobs created in October, should be acknowledged and welcomed. But employment in the US is still 7.5 million below the level before the recession and high levels of unemployment would, given population growth, continue for many years if future jobs growth continued at that rate. The concern about the economy is shared by the Fed prompting it to introduce this week a new programme of quantitative easing. Opinion is divided on the likely efficacy of the initiative in raising US growth. But the likely depressing effect on the nominal dollar exchange rate while tending to raise global demand, other things equal, appears to be worsening the 'currency wars' problem with China in particular as it seeks to defend against capital inflows, upward pressure on the renminbi and loss of international competitiveness. In sum, the risk is increasing of protectionist responses that slow the growth of world trade and the global recovery even as global demand is rising.

It is against this background that we have prepared our latest forecasts. The underlying background, assumptions and predictions are discussed fully in the *Forecasts of the Scottish economy* section below. We present here only a summary of the main results.

GVA Forecasts

Table 9 presents our forecasts for Scottish GVA - GDP at basic prices - for 2010 to 2012. As before we present a central forecast, which we hold to be most probable and high growth and low growth forecasts which define the range of outcomes in which Scottish growth is likely to fall. In the subsequent discussion we concentrate mainly on the central forecast.

Table 9: Forecast Scottish GVA Growth in three scenarios, 2010-2012

GVA Growth (% per annum)	**2010**	**2011**	**2012**
High growth	1.3	2.1	2.4
June forecast	*1.4*	*2.1*	*2.8*
Central	**1.0**	**1.1**	**1.9**
June forecast	*0.7*	*1.1*	*2.1*
Low growth	0.5	0.3	1.0
June forecast	*0.0*	*0.1*	*0.7*

Positive growth is forecast in all years and on all 3 scenarios. GVA growth at 1% is forecast to be stronger this year than in our June forecast of 0.7%. Household spending is recovering but increases only marginally this year, then increases slightly in 2011 and is close to trend in 2012. The rise in planned welfare cuts since our last forecast will take out nearly £2bn of demand from Scottish household by 2014-15. The timing is uncertain but we expect it to contribute to the weak growth of household spending. Export growth picks up this year as the growth of world trade recovers. There is strong positive growth for Scottish exports both to rest of world and rest of UK, with the latter weaker due to the fiscal consolidation. Investment growth in 2010 is revised up from our June forecast and the rebound continues into 2011 and 2012 after a recession that produced one of the most severe contractions in investment in modern times. The fiscal consolidation has broadly the same aggregate impact as forecast in June with Scotland experiencing a major cut in public spending on both resource and capital account next year. All these reasons taken together lead to a forecast of 1.1% GDP growth in 2011 and 1.9% in 2012. That is the same as the June forecast for 2011 but slightly lower for 2012. Our fear is that the greater welfare spending cuts may dampen growth in 2012 compared tom our previous forecast.

Compared to the UK these forecasts suggest that the recovery continues to be weaker in Scotland than the UK, especially in 2011.

Employment forecasts

Table 10 presents our forecasts for net employee jobs for the 3 years on the 3 scenarios.

Table 10: Forecast Scottish net jobs growth in three scenarios, 2010-2012

	2010	**2011**	**2012**
High growth	-7,000	42,300	50,404
June forecast	*-20,399*	*35,142*	*53,059*
Central	**-12,794**	**21,224**	**39,141**
June forecast	*-33,546*	*14.856*	*44,612*
Low growth	-22,700	4,400	21,100
June forecast	*-48,129*	*6,036*	*6,615*

Table 10 indicates that our jobs forecast for 2010 is appreciably different from June on all scenarios. This is in part due to changes in the latest official employee jobs data, which significantly revises down estimates for employment in 2009. Our lower forecast takes account of that. In addition, our employment forecasts also reflect stronger predicted GDP growth in some scenarios and years after allowing for a changing forecast of productivity increases. Net jobs grow by -0.6% in 2010, +1.0% in 2011, and +1.8% in 2012. By 2012 total jobs are forecast to be around 47,000 lower than the last peak in 2008. By sector, the burden of jobs losses is borne by the service sector in 2010 with net job losses of just under 14,000. Construction loses just above 900 jobs this year, while jobs are gained - just under 2,000 - in production as manufacturing especially expands. Positive but fairly weak jobs growth occurs in all aggregate sectors in 2011 and 2012.

Unemployment forecasts

The key unemployment forecasts are summarised in Table 10 below.

Table 11: ILO unemployment rate and claimant count rate measures of unemployment under each of the three forecast scenarios

		2010		2011		2012	
ILO unemployment rate							
High growth		9.1%		9.6		8.2	
Central		**9.3%**		**10.7**		**9.7**	
	Numbers		**245,056**		**286,821**		**261,730**
Low growth							
Claimant count rate							
High growth		4.8%		5.1		4.3	
Central		**5.2%**		**5.9**		**5.4**	
	Numbers		**143,214**		**167,623**		**152.959**
Low growth		5.9%		7.2%		7.0%	

The ILO rate is our preferred measure since it identifies those workers who are out of a job and are looking for work, whereas the claimant count simply records the unemployed who are in receipt of unemployment benefit. We noted in the discussion above of labour market performance during the recession that while job change is a key determinant of unemployment, it also depends on movements in inactivity i.e. the numbers not looking for work. We noted how inactivity rose last year in Scotland. The paradox is that as job prospects pick up inactivity can fall and unemployment may rise. We predict that unemployment will continue to rise into next year peaking at around 286,000 before falling to just under 262,000 in 2012.

Brian Ashcroft
5 November 2010

Endnotes

[1] The latest data include the implementation of significant methodological developments and improvements to the data: updated weights to 2007; benchmarking to input-output data to 2007; replacement of panel estimation with ratio estimation for production industries; and introduction of an improved measure for health service output.

[2] In the statistical work on Okun's Law that we discuss below there is a suggestion that the growth required to keep unemployment stable in the 2000s was 0.6% per quarter in the UK compared to 0.5% - over a little longer period - in Scotland.